

ABSTRACT OF THE DISCLOSURE

For measuring the flow and the thermal conductivity of a fluid, a sensor is used, which has a first temperature detector for measuring a first temperature and a second temperature detector for measuring a second temperature. A heating is arranged between the temperature detectors. Two measured quantities are determined by means of the temperature detectors, a first of which is e.g. a difference between the temperatures and a second one of which is one of the temperatures. By comparing the two measured quantities, the flow and the thermal conductivity of the fluid can be determined.